

*Excellence in Electronics***TYPE**
CK6397

The CK6397 is a filament type RF Power Pentode of subminiature construction designed for use as an intermittent duty cycle Class A or Class C amplifier such as in portable transceiver equipment or as a frequency doubler at output frequencies in the VHF Range. It is designed for dependable operation under conditions of shock and vibration usually found in mobile and aircraft applications. The flexible terminal leads may be soldered or welded directly to the terminals of circuit components without the use of sockets. Standard 8-pin subminiature sockets may be used by cutting the leads to a suitable length.

MECHANICAL DATA**ENVELOPE:** T-3 Glass**BASE:** Subminiature Button 8-Pin (0.017" tinned flexible leads.
Length: 1.25" min.)**TERMINAL CONNECTIONS:**

Lead 1 Filament, negative

Lead 2 No Connection

Lead 3 Plate

Lead 4 No Connection

Lead 5 Filament center-tap,
Grid #3, (F+parallel)

Lead 6 Grid #2

Lead 7 Filament, positive

Lead 8 Grid #1

MOUNTING POSITION: Any**ELECTRICAL DATA****DIRECT INTERELECTRODE CAPACITANCES:** (μfads)

| | Unshielded | Shielded |
|--------------------------|------------|------------|
| Grid to Plate: (g1 to p) | 0.06 | 0.055 max. |
| Input: g1 to (F+g2+g3) | 2.6 | 2.75 |
| Output: p to (F+g2+g3) | 2.15 | 3.0 |

RATINGS - ABSOLUTE MAXIMUM VALUES:

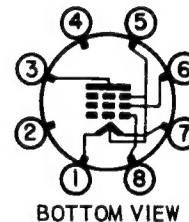
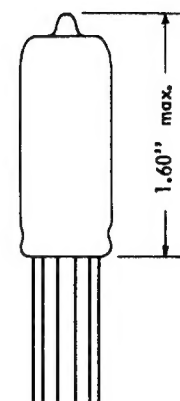
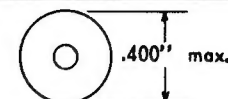
| | |
|-----------------------|--------------------------|
| Filament Voltage (dc) | 1.25/2.5 \pm 12% volts |
| Plate Voltage | 135 volts |
| Grid #2 Voltage | 135 volts |
| Grid #1 Voltage | 100 volts |
| Plate Dissipation | 1.5 watts |
| Grid #2 Dissipation | 0.6 watt |
| Cathode Current | 14 ma. |
| Grid #1 Current | 0.375 ma. |
| Altitude | 60,000 feet |
| Impact | 500 g |

CHARACTERISTICS AND TYPICAL OPERATION - CLASS A AMPLIFIER:

| | |
|------------------|-----------------------|
| Filament Voltage | 1.25/2.5 volts |
| Filament Current | 125/62.5 ma. |
| Plate Voltage | 125 volts |
| Grid #2 Voltage | 125 volts |
| Grid #1 Voltage | -7.5 volts |
| Plate Current | 7.25 ma. |
| Grid #2 Current | 1.2 ma. |
| Transconductance | 1950 μmhos |

CHARACTERISTICS AND TYPICAL OPERATION - FREQUENCY DOUBLER:

| | | |
|----------------------------|------|--------------------|
| Filament Voltage (dc) | 1.25 | 1.25 volts |
| Filament Current | 125 | 125 ma. |
| DC Plate Voltage | 120 | 120 volts |
| DC Grid #2 Voltage | 120 | 120 volts |
| Grid Bias Resistance | 0.27 | 0.22 meg. |
| Peak RF Grid Drive Voltage | 65 | 80 volts |
| Plate Current | 6.5 | 7.5 ma. |
| Grid #2 Current | 2.0 | 2.50 ma. |
| Grid #1 Current (approx.) | 220 | 325 $\mu\text{a.}$ |
| Useful Power Output | 115 | 140 mw. |
| Output Frequency | 125 | 250 Mc. |

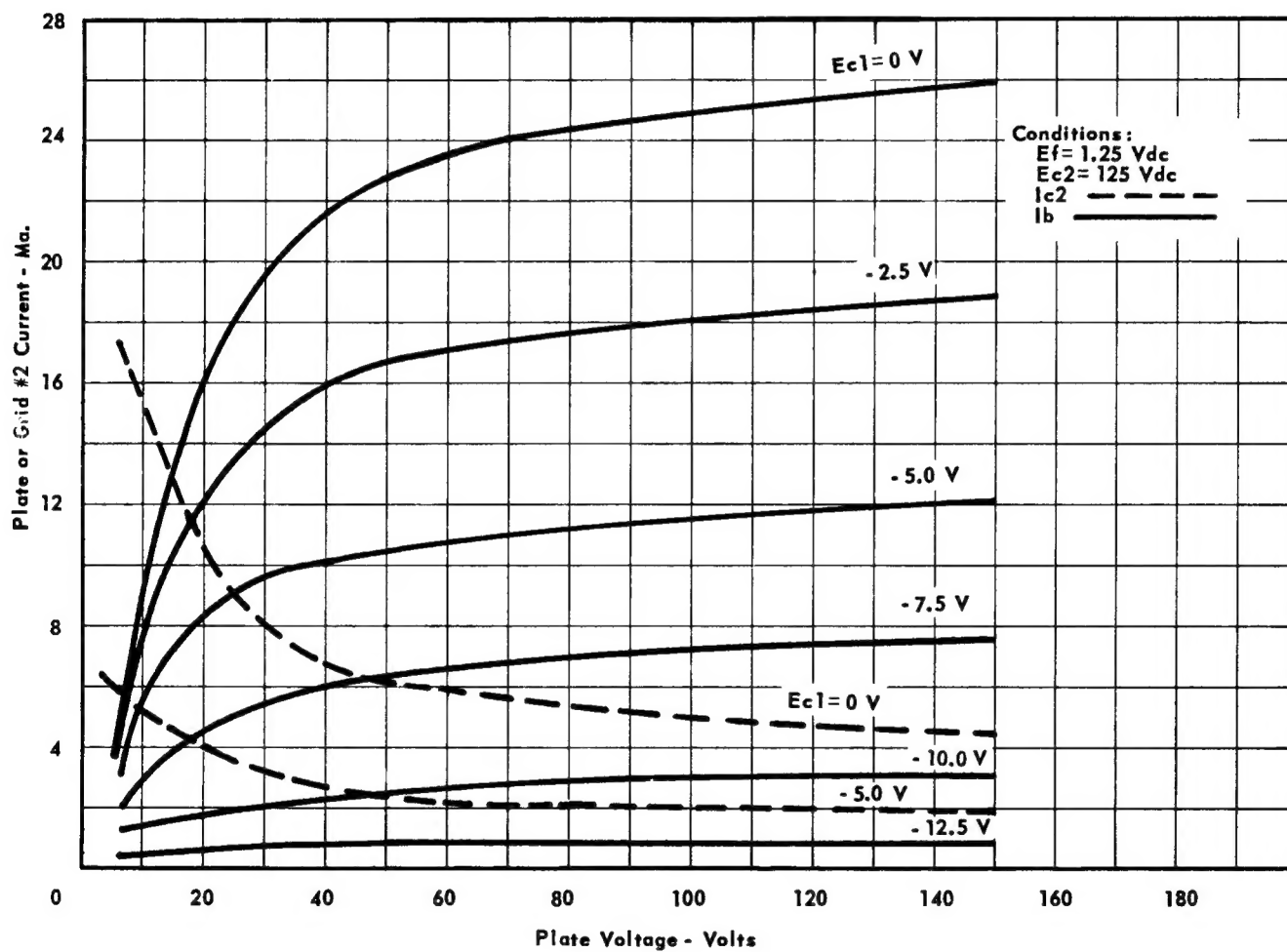


6CL



SUBMINIATURE POWER PENTODE

AVERAGE PLATE CHARACTERISTICS



RAYTHEON MANUFACTURING COMPANY

RECEIVING AND CATHODE RAY TUBE OPERATIONS



SUBMINIATURE POWER PENTODE

